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[Interferon gamma in the treatment of patients with moderate COVID-19]

[Article in Russian]

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Abstract

Introduction: Interferons are produced in response to the presence of pathogens in cells and are responsible for the proper formation of immune reaction. Preliminary data obtained in studies of properties of recombinant interferon gamma (IFN-γ) that involved patients with community-acquired pneumonia (including bacterial), acute respiratory viral infection (ARVI), influenza and new coronavirus infection have shown promising results.The purpose of the study was to assess the effect of subcutaneous administration of IFN-γ in patients with viral pneumonia on the changes of vital signs and the duration of hospital stay.

Material and methods: An open-label, randomized, low-interventional study included patients with moderate new coronavirus infection COVID-19 over 18 years of age of both sexes. IFN-γ 500,000 IU was administered s/c, daily, once a day, during 5 days.

Results: IFN-γ in addition to complex therapy of the disease resulted in more favorable changes in the stabilization of vital signs, as well as in reduced length of fever and hospital stay by 2 days what allows suggesting a positive effect of this substance on the recovery processes in patients with moderate COVID-19. Special emphasis should be made to the fact that patients who received recombinant IFN- γ experienced no progression of respiratory failure and required no transfer to intensive care unit.

Discussion: This study confirms earlier obtained data on the positive effect of IFN-γ on the rate of clinical stabilization and recovery of patients with community-acquired pneumonia and viral infections. Presented results are limited to a small number of patients; further study of drug properties in post-marketing studies is required.

Conclusion: Progress in the treatment of patients with moderate COVID-19 by adding recombinant IFN-γ to the complex therapy may reasonably expand the range of existing treatment options for this infection.

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